



# Understanding Endometrial Patterns

## What is Endometrium?

The endometrium is the lining of the uterus. Endometrial tissues are composed of two distinct layers called the stratum functionalis and the stratum basalis.

With every cycle the endometrium goes through four key phases:

- Follicular phase (functionalis tissues thicken)
- Early Luteal phase (functionalis begins to mature)
- Functional / Secretory phase (functionalis is fully matured and ready to support embryo implantation)
- Menses (if no pregnancy occurs)

The endometrium has a distinct appearance on ultrasound during each phase, which is what makes endometrial pattern useful for guiding your care.

## What is Endometrial Pattern?

Endometrial pattern assessment is an ultrasound imaging-based method of determining the stage of development of the endometrium within the reproductive cycle. Pattern assessments may also be conducted to measure the response of endometrial tissues to medications.

## Why does Endometrial Pattern Matter?

The pattern assigned during routine endometrial lining checks may be used to guide decision making around ovulation triggers, embryo transfer procedures, or endometrial biopsies during mock cycles. Matching the stage of your lining to each procedure helps every step happen at the right point in your cycle.

## Interpretation of Endometrial Patterns:

Your AIM Test provides a comprehensive endometrial receptivity score that incorporates many biological factors — endometrial pattern is just one of them. Pattern is included on your report because clinicians use it routinely. Because AIM testing is done about 48 hours before embryo transfer, a C to D pattern is typical for this point in your cycle and shows your lining is developing as expected. If your pattern falls outside this range, it doesn't mean something is wrong — it gives your care team information to fine-tune your treatment.

Endometrial Pattern	Cycle Phase	Tissue Dynamics / Significance
<b>A</b>	Post menstrual	Depleted functionalis; thin endometrium; single line; no detectable differentiation of stratum functionalis and basalis
<b>B</b>	Follicular	Basalis begins proliferation and rebuilding the functionalis.
<b>C</b>	Early Luteal	Proliferative development is advanced and the endometrium has thickened; pronounced triple line; early stages of tissue differentiation begin.
<b>D</b>	Functional	Endometrial tissues are fully differentiated and in the secretory phase; homogenous echogenicity.
<b>M</b>	menstrual	endometrial degradation and active menstrual flow observed.



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## References:

1) Baerwald AR, Pierson RA. Endometrial development in association with ovarian follicular waves during the menstrual cycle. *Ultrasound Obstet Gynecol.* 2004 Sep;24(4):453–60